US ERA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

March 21, 2012

Ronald Zelt USGS 5231 South 19th Lincoln, NE 68512-1271

Re: Sediment Sampling Plan Review
Prepared by the Scientific Support Coordination Group (SSCG)
Chemistry / Oil Fingerprinting / Biodegradation Subgroup
Enbridge Line 6B MP608 Release, Marshall, MI

Dear Ron:

Following discussions with the internal SSCG staff, I have elected to amend the Charge No.1 to the SSCG in the following manner (*changes in italics*):

Given the information that has been transmitted to you, and given the need to complete any necessary studies prior to April 30, 2012...

a) Provide an evaluation of viable analytical and sampling approaches (such as sampling design, sample collection and sample processing/handling) including benefits and draw backs for each, to quantify the amount of submerged oil in the Kalamazoo River sediments attributable to the Enbridge Oil pipeline Release.
 b) Provide a recommendation for the best analytical and sampling approach to accomplish this goal.

In order to demonstrate the potential value of incorporating an explicit statistical basis into the oil quantification task, I accept the group's recommendation to prepare a review of the last round (Fall 2011) of submerged oil quantification. I understand that Jacqui Michel, of Research Planning, Inc (RPI), and her associate Zach Nixon will be performing the initial review and will have it completed prior to April 15, 2012. Based upon the results and recommendations of this review, I will consider whether to incorporate the findings into the 2012 submerged oil quantification efforts.

Enbridge is hereby directed to provide all documents to the SSCG related to Fall 2011 submerged oil sediment sampling and quantification. I fully support the measured approach to evaluating a modified sampling scheme for oil quantification. Thanks to the Subgroup for bringing this to my attention.

Sincerely,

End. D.b

Ralph Dollhopf Federal On-Scene Coordinator and Incident Commander U.S. EPA, Region 5

cc: L. Kirby-Miles, U.S. EPA, ORC

Sonia Vega, U.S. EPA, Deputy Incident Commander

John Sobojinski, Enbridge Isaac Aboulafia, START Mike Alexander, MDEQ Adriana Bejarano, RPI

Michel Boufadel, Temple University

Jim Chapman, U.S. EPA Isabelle Cozzarelli, USGS Mick DeGraeve, GLEC Linda Dykema, MDCH Jennifer Gray, MDCH Steve Hamilton, MSU

Bruce Hollebone, Env. Canada

Alan Humphrey, U.S. EPA – ERT

Neville Kingham, Kingham Consulting Services

Jacqui Michel, RPI

Stephanie Millsap, USFWS Greg Powell, U.S. EPA – ERT

David Soong, USGS

 $Mark\ Sprenger,\ U.S.\ EPA-ERT$

Bob Steede, Enbridge Al Uhler, NewFields

Albert Venosa, U.S. EPA

Lisa Williams, USFWS

Robyn Conmy, U.S. EPA

From: SSCG Chemistry and Biodegradation Subgroup

To: Mr. Ralph Dollhopf, Federal OSC and Incident Commander, U.S. EPA, Region 5

Date: March 20, 2012

Subject: Clarification of FOSC's Charge No. 1 to the SSCG, with respect to sampling design for quantification of submerged oil

Dear Mr. Dollhopf,

With this memorandum, the Chemistry, Fingerprinting, and Biodegradation Subgroup of the SSCG submits a request for clarification on the scope of your charge to the SSCG.

Recently, the Subgroup has begun discussion of a topic that we believe will prove valuable to achieving the goal of reaching the spill response end points, but we are not sure that it falls within the scope of current charges submitted by the FOSC to the SSCG. Several SSCG members, including Drs. Michel Boufadel and Jacqui Michel, have suggested that a statistically-based design for sampling submerged oil in the Kalamazoo River would be an improvement for acquiring unbiased estimates of the mass and volume of remaining submerged oil within the impacted area. With Subgroup concurrence, Jacqui invited Zach Nixon (also with RPI) to participate in one of the Subgroup's weekly meetings to give a short presentation on types of statistically-based sampling designs that might be appropriate for our site. After the call, in reflecting on what was presented and considering next steps forward, members of the Subgroup have expressed that it would be useful to have Zach review and evaluate the sampling program that was used for the Fall 2011 submerged oil quantification. Results would provide a comparison and readily grasped demonstration of the potential benefits (e.g., in terms of reduced uncertainty in submerged oil quantity estimates) and costs (e.g., number of samples, stratifications, or schedule/timeline impacts) of any changes in the sampling program that might be suggested. Zach has confirmed to the Subgroup leader that he has the interest and availability to do this evaluation.

Now the Subgroup wishes to confirm with the FOSC,

- 1. Is this a topic and activity that you desire the SSCG to pursue?
- 2. If so, do you consider this task within the current scope of Charge No. 1 to the SSCG, which presently states:
 - a) Provide an evaluation of viable analytical approaches, including benefits and draw backs for each, to quantify the amount of submerged oil in the Kalamazoo River sediments attributable to the Enbridge Oil pipeline Release.
 - b) Provide a recommendation for the best analytical approach to accomplish this goal.

Should you decide to enlarge the scope of the FOSC's charge, we request that the language allow the SSCG to provide recommendations on sampling designs, sample collection, and sample processing/handling, without reducing our present scope of providing recommendations on analytical scope and protocols.

On behalf of the SSCG sub-group, very sincerely yours,

Ronald B. Zelt, P.HWQ. Supervisory Hydrologist U.S. Geological Survey